

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 59

[AD-FRL_____]

National Volatile Organic Compound Emission Standards for

Architectural Coatings

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule; extension of public comment period.

SUMMARY: The EPA is extending the public comment period for the proposed National Volatile Organic Emission Standards for Architectural Coatings. As initially published in the FEDERAL REGISTER on June 25, 1996 (61 FR 32729), written comments on the proposed rule were to be submitted to the EPA on or before August 30, 1996 (a 60-day public comment period). The public comment period is being extended and will end on September 30, 1996.

Two errors in the proposed rule are being corrected in this notice, and the text of the corrected proposed rule is printed herein for the convenience of interested parties.

In addition, this notice discusses the definition of "small entity" used to evaluate impacts under the Regulatory Flexibility Act since it is different than the

definition used by the Small Business Administration (SBA). The EPA requests comments on this alternative definition.

ADDRESSES: Comments. Comments should be submitted (in duplicate) to: Air and Radiation Docket and Information Center (6102), Attention: Docket No. A-92-18, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460. Comments and data may also be submitted electronically by sending electronic mail (e-mail) to: a-and-r-docket@epamail.epa.gov. Electronic comments must be submitted as an ASCII file avoiding the use of special characters and any form of encryption. Comments and data will also be accepted on diskette in WordPerfect 5.1 file format or ASCII file format. All comments and data in electronic form must be identified by the docket number A-92-18. No Confidential Business Information (CBI) should be submitted through e-mail.

Docket. The proposed regulatory text and other materials related to this rulemaking, excepting any information claimed as CBI, are available for public review. This public record has been established for the rulemaking under Docket No. A-92-18 and contains

supporting information used in developing the proposed rule. The docket, including paper versions of electronic comments, is available for public inspection and copying between 8:30 a.m. and 5:30 p.m., Monday through Friday, at the U.S. Environmental Protection Agency Air and Radiation Docket and Information Center (6102), Waterside Mall, Room M1500, 401 M Street, SW, Washington, DC 20460; telephone number (202) 260-7548, FAX (202) 260-4400. A reasonable fee may be charged for copying. FOR FURTHER INFORMATION CONTACT: Ms. Ellen Ducey, Coatings and Consumer Products Group, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina 27711, telephone number (919) 541-5408.

SUPPLEMENTARY INFORMATION: On June 25, 1996, at 61 FR 32729, the EPA published the proposed National Volatile Organic Compound Emission Standards for Architectural Coatings and provided a 60-day public comment period. Requests have been received to extend the public comment period beyond the 60 days originally provided. In consideration of these requests, some of which were from small businesses that will be affected by

the rule, the EPA is extending the comment period by 30 days (until September 30, 1996), in order to give all interested persons the opportunity to comment fully.

The proposed rule text is included in this notice to enhance its availability to commenters. Corrections of two errors in the previous version of the rule text are highlighted below.

The first correction is in the definition of volatile organic compound (VOC) content in Section 59.401. Both Equation 1 and Equation 2 define the term W_s . This term is used to represent "the weight of volatiles, in grams." In the previous version of the proposed rule, it was incorrectly defined as "the weight of VOC, in grams." The EPA's Method 24 - Determination of volatile matter content, water content, density, volume solids, and weight solids of surface coatings details the standard methods used to determine the VOC content of a coating, including the volatile content of coatings.

The second correction is in Section 59.403 which details container labeling requirements. The error in the rule text was in paragraph (a)(3), which describes

the VOC content type of information that must be on the label. The incorrect portion of the proposed rule text required the label to include a statement of the VOC content in the container. This is being corrected to specify that the VOC content statement on the label shall refer to the maximum VOC content of the coating in the container, displayed in units of grams of VOC per liter of coating thinned to the manufacturer's recommendation, excluding the volume of any water, exempt compounds, or colorant added to tint bases.

Information on the label about the maximum VOC content of the coating may not allow consumers to compare VOC contents of different coatings. This is because manufacturers would tend to specify on the label that the maximum VOC content of the coating is the applicable standard. Use of a maximum VOC content on the label that is well above the actual VOC content of the coating would allow a manufacturer to account for fluctuations in VOC content of the coating due to batch variation, as well as formulation modifications without requiring a label change to reflect the actual VOC content adjustment. The EPA requests comment on whether consumers would benefit from a VOC labeling requirement that more accurately

reflects the actual VOC content of the coating. For example, the requirement could specify that the VOC content of the coating must be within 75 grams of the VOC content on the label. Alternatively, the EPA requests comment on the use of a label which would specify "this coating meets all applicable State and Federal VOC requirements."

Request for Comment on Definition of Small Business

The Regulatory Flexibility Act of 1980 requires special consideration of the effect of Federal regulations on small entities. Results of the initial regulatory flexibility analysis were summarized in Section VII.D of the June 25, 1996 FEDERAL REGISTER notice for the architectural coatings proposed rule. Docket No. A-92-18 contains the complete initial regulatory flexibility analysis.

To conduct a regulatory flexibility analysis, small entities may be defined using the criteria prescribed in the Regulatory Flexibility Act or some other criteria identified by the EPA. The SBA's general size standard definitions for Standard Industrial Classification (SIC) codes is one way to define small businesses. These size

standards are presented either by number of employees or by annual receipt levels, depending on the SIC code. For SIC 2851, Paint and Allied Products, the SBA defines small business as fewer than 500 employees. Because the coating manufacturing industry is not labor intensive, a revenue value cut-off rather than a number of employees cut-off appears to be a better measure to reflect the ability of a manufacturer to devote time as well as research and development resources to meet regulation requirements. Based on input from stakeholders, the EPA has defined small manufacturers as having less than \$10 million in annual architectural coating sales and less than \$50 million in total annual sales of all products. Using this alternative definition, between 70 and 85 percent of the architectural coating industry would be classified as small. The EPA requests comment on use of this alternative definition to identify small entities under the Regulatory Flexibility Act.

List of Subjects in 40 CFR Part 59 .

Environmental protection, Air pollution control,
Architectural coatings, Ozone, Volatile organic compound.

DATE

Mary D. Nichols
Assistant Administrator
for Air and Radiation

(6560-50-P)

For the reasons set out in the preamble, it is proposed that 40 CFR Part 59 be amended as follows:

PART 59--NATIONAL VOLATILE ORGANIC COMPOUND EMISSION
STANDARDS FOR CONSUMER AND COMMERCIAL PRODUCTS

Subpart D--National Volatile Organic Compound Emission
Standards for Architectural Coatings

1. The authority citation for part 59 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

2. Part 59 is amended by adding subpart D to read as follows:

Subpart D--National Volatile Organic Compound Emission
Standards for Architectural Coatings
Secs.

59.400 Applicability and designation of source.

59.401 Definitions.

59.402 Standards.

59.403 Container labeling requirements.

59.404 Test methods.

59.405 Recordkeeping requirements.

59.406 Reporting requirements.

59.407 Variances.

Subpart D--National Volatile Organic Compound Emission

Standards for Architectural Coatings

§59.400 Applicability and designation of source .

(a) The provisions of this subpart apply to architectural coatings manufactured or imported on or after April 1, 1997 for sale or distribution in the United States.

(b) The provisions of this subpart apply to each manufacturer or importer of architectural coatings that sells or distributes these coatings in the United States.

(c) The provisions of this subpart do not apply to architectural coatings meeting the requirements in paragraphs (c)(1), (c)(2), (c)(3), (c)(4), or (c)(5) of this section.

(1) Coatings that are manufactured exclusively for sale or distribution outside the United States.

(2) Coatings that are manufactured or imported prior to April 1, 1997.

(3) Coatings that are sold in nonrefillable aerosol containers.

(4) Coatings that are collected and redistributed at community-based paint exchanges.

(5) Coatings that are sold in containers with a volume of one liter or less.

§59.401 Definitions.

Administrator means the Administrator of the United States Environmental Protection Agency (U.S. EPA) or his or her authorized representative.

Antenna coating means a coating formulated and recommended for application to equipment and associated structural appurtenances that are used to receive or transmit electromagnetic signals.

Anti-fouling coating means a coating formulated and recommended for application to submerged stationary structures and their appurtenances to prevent or reduce the attachment of marine or freshwater biological organisms, including, but not limited to, coatings registered with the EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136, et seq.) and nontoxic foul-release coatings.

Anti-graffiti coating means a clear or opaque high performance coating specifically labeled as an anti-graffiti coating and formulated and recommended for application to interior and exterior walls, doors, partitions, fences, signs, and murals to deter adhesion of graffiti and to resist repeated scrubbing and exposure

to harsh solvents, cleansers, or scouring agents used to remove graffiti.

Appurtenance means any accessory to a stationary structure, whether installed or detached at the proximate site of installation, including but not limited to: bathroom and kitchen fixtures; cabinets; concrete forms; doors; elevators; fences; hand railings; heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools; lamp posts; partitions; pipes and piping systems; rain gutters and downspouts; stairways, fixed ladders, catwalks, and fire escapes; and window screens.

Architectural coating means a coating recommended for field application to stationary structures and their appurtenances, to portable buildings, to pavements, or to curbs.

Architectural coating importer or importer means a company, group, or individual that brings architectural coatings from a location outside the United States into the United States for sale or distribution within the United States.

Architectural coating manufacturer or manufacturer means a company, group, or individual that produces,

packages, or repackages architectural coatings for sale or distribution in the United States. A company, group, or individual that repackages architectural coatings as part of a community-based paint exchange, and does not produce, package, or repackage any other architectural coatings for sale or distribution in the United States, is excluded from this definition.

Below-ground wood preservative means a coating that is formulated and recommended to protect below-ground wood from decay or insect attack and that is registered with the EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136, et seq.).

Bituminous coating and mastic means a coating or mastic formulated and recommended for roofing, pavement sealing, or waterproofing that incorporates bitumens. Bitumens are black or brown materials including, but not limited to, asphalt, tar, pitch, and asphaltite that are soluble in carbon disulfide, consist mainly of hydrocarbons, and are obtained from natural deposits of asphalt or as residues from the distillation of crude petroleum or coal.

Bond breaker means a coating formulated and recommended for application between layers of concrete to

prevent a freshly poured top layer of concrete from bonding to the layer over which it is poured.

Chalkboard resurfacer means a coating formulated and recommended for application to chalkboards to restore a suitable surface for writing with chalk.

Clear coating means a coating that produces a dry film that allows light to pass through, so that the substrate may be distinctly seen.

Clear and semitransparent wood preservative means a coating that is formulated and recommended to protect exposed wood from decay or insect attack, registered with the EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136, et seq.), that may change the color of the substrate but does not conceal the substrate.

Coating means a protective, decorative, or functional film applied to a surface. Such materials include, but are not limited to, paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, enamels, and temporary protective coatings.

Coating product means all coatings produced by one manufacturer or imported by one importer that have the

same formulation and are defined within the same architectural coating category listed in Table 1 of this subpart.

Colorant means a concentrated pigment dispersion of water, solvent, and/or binder that is added to an architectural coating in a paint store or on-site to produce the desired color.

Community-based paint exchange means a program in which members of the general public may drop off and pick up usable post-consumer architectural coatings in order to reduce household hazardous waste.

Concrete curing compound means a coating formulated and recommended for application to freshly placed concrete to retard the evaporation of water.

Concrete protective coating means a high build coating formulated and recommended for application in a single coat over concrete, plaster, or other cementitious surfaces. These coatings are formulated to be primerless, one-coat systems that can be applied over form oils and/or uncured concrete. These coatings prevent spalling of concrete in freezing temperatures by providing long-term protection from water and chloride ion intrusion.

Container means the individual receptacle that holds the coating for storage and distribution.

Dry fog coating means a coating formulated and recommended only for spray application such that overspray droplets dry before subsequent contact with incidental surfaces in the vicinity of the surface coating activity.

Exempt compounds means specific organic compounds that are not considered volatile organic compounds due to negligible photochemical reactivity. The exempt compounds are specified in §51.100(s) of this chapter.

Exterior coating means an architectural coating formulated and recommended for use in conditions exposed to the weather.

Extreme high durability coating means an air dry fluoropolymer-based coating that is formulated and recommended for the protection of architectural subsections and that meets the weathering requirements of American Architectural Manufacturer's Association specification 605.2 Section 7.9.

Fire-retardant/resistive coating means a clear or opaque coating formulated and recommended to retard ignition and flame spread, or to delay melting or

structural weakening due to high heat that has been fire tested and rated by a certified laboratory for use in bringing buildings and construction materials into compliance with Federal, State, and local building code requirements.

Flat coating means a coating that is not defined under any other definition in this section and that registers gloss less than 15 on an 85-degree meter or less than 5 on a 60-degree meter according to American Society for Testing and Materials Method D523, Standard Test Method for Specular Gloss.

Floor coating means a coating that is formulated and recommended for application to flooring including, but not limited to, decks, porches, and steps and that has a high degree of abrasion resistance.

Flow coating means a coating that is used by electric power companies or their subcontractors to maintain the protective coating systems present on utility transformer units.

Form release compound means a coating formulated and recommended for application to a concrete form to prevent the freshly placed concrete from bonding to the form. The form may consist of wood, metal, or some material

other than concrete.

Graphic arts coating or sign paint means a coating formulated and recommended for hand-application either on site or in shop by artists using brush or roller techniques to indoor or outdoor signs (excluding structural components) and murals including lettering enamels, poster colors, copy blockers, and bulletin enamels.

Heat reactive coating means a high performance phenolic-based coating requiring a minimum temperature of 191 °C (375 °F) to 204 °C (400 °F) to obtain complete polymerization or cure. These coatings are formulated and recommended for commercial and industrial use to protect substrates from degradation and maintain product purity in which one or more of the following extreme conditions exist:

- 1) Continuous or repeated immersion exposure to 90 to 98 percent sulfuric acid or oleum;
- 2) Continuous or repeated immersion exposure to strong organic solvents;
- 3) Continuous or repeated immersion exposure to petroleum processing at high temperatures and

pressures; and

4) Continuous or repeated immersion exposure to food or pharmaceutical products which may or may not require high temperature sterilization.

High temperature coating means a high performance coating formulated and recommended for application to substrates exposed continuously or intermittently to temperatures above 260 °C (500 °F).

Impacted immersion coating means a high performance maintenance coating formulated and recommended for application to steel structures subject to immersion in turbulent, debris-laden water. These coatings are specifically resistant to high-energy impact damage caused by floating ice or debris.

Importer (See the definition for architectural coating importer.)

Industrial maintenance coatings mean high performance architectural coatings including primers, sealers, undercoaters, and intermediate and topcoats formulated for substrates in industrial, commercial, or institutional situations that are exposed to one or more of the following extreme environmental conditions:

- 1) Immersion in water, wastewater, or chemical solutions (aqueous and nonaqueous solutions), or chronic exposure of interior surfaces to moisture condensation;
- 2) Acute or chronic exposure to corrosive, caustic, or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions;
- 3) Repeated exposure to temperatures above 120 °C (250 °F);
- 4) Repeated (frequent) heavy abrasion, including mechanical wear and repeated (frequent) scrubbing with industrial solvents, cleansers, or scouring agents; or
- 5) Exterior exposure of metal structures and structural components.

Interior clear wood sealer means a low viscosity coating formulated and recommended for sealing and preparing porous wood by penetrating the wood and creating a uniform smooth substrate for a finish coat of paint or varnish.

Interior coating means an architectural coating formulated and recommended for use in conditions not exposed to natural weathering.

Label means any written, printed, or graphic matter affixed to, applied to, attached to, blown into, formed, molded into, embossed on, or appearing upon any architectural coating container for purposes of branding, identifying, or giving information with respect to the product, use of the product, or contents of the container.

Lacquer means a clear or pigmented wood finish including clear lacquer sanding sealers formulated with cellulosic or synthetic resins to dry by evaporation without chemical reaction and to provide a solid, protective film.

Low solids stain means a stain containing one pound or less of solids per gallon (0.12 kilograms per liter) of coating material and for which at least half of the volatile component is water.

Low solids wood preservative means a wood preservative containing one pound or less of solids per gallon (0.12 kilograms per liter) of coating material and for which at least half of the volatile component is

water.

Manufacturer (See the definition for architectural coating manufacturer.)

Magnesite cement coating means a coating formulated and recommended for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.

Mastic texture coating means a coating formulated and recommended to cover holes and minor cracks and to conceal surface irregularities, and is applied in a single coat of at least 10 mils (0.010 inches; dry film thickness).

Metallic pigmented coating means a nonbituminous coating containing at least 0.4 pounds of metallic pigment per gallon (0.048 kilograms per liter) of coating including, but not limited to, zinc pigment.

Multi-colored coating means a coating that is packaged in a single container and exhibits more than one color when applied.

Nonferrous ornamental metal lacquers and surface protectant means a clear coating formulated and recommended for application to ornamental architectural

metal substrates (bronze, stainless steel, copper, brass, and anodized aluminum) to prevent oxidation, corrosion, and surface degradation.

Nonflat coating means a coating that is not defined under any other definition in this section and that registers a gloss of 15 or greater on an 85-degree meter or five or greater on a 60-degree meter according to American Society for Testing and Materials Method D523, Standard Test Method for Specular Gloss.

Nuclear coating means any protective coating used to seal porous surfaces such as steel (or concrete) that otherwise would be subject to intrusion by radioactive materials. These coatings must be resistant to long-term (service life) cumulative radiation exposure (American Society for Testing and Materials Method D4082), relatively easy to decontaminate (American Society for Testing and Materials Method D4256), and resistant to various chemicals to which the coatings are likely to be exposed (American Society for Testing and Materials Method D3912). General protective requirements are outlined by the Department of Energy (formerly U.S. Atomic Energy Commission Regulatory Guide 1.54).

Opaque coating means a coating producing a dry film

that does not allow light to pass through, so that the substrate is concealed from view.

Opaque stain means a coating labeled as a stain and formulated and recommended to hide the surface but not conceal its texture.

Opaque wood preservative means a coating formulated and recommended to protect wood from decay or insect attack that is not classified as a clear, semitransparent, or below-ground wood preservative and that is registered with the EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.).

Pigmented means containing finely ground insoluble powder dispersed to give a characteristic color.

Post-consumer coating means an architectural coating that has previously been purchased or distributed but not applied, and reenters the marketplace to be purchased by or distributed to a consumer. Post-consumer coatings include, but are not limited to, coatings collected during community-based household hazardous waste collection programs for repackaging or blending with virgin coating materials.

Pretreatment wash primer means a primer that

contains a minimum of 0.5 percent acid, by weight, that is applied directly to bare metal surfaces in thin films to provide corrosion resistance and to promote adhesion of subsequent topcoats.

Primer means a coating formulated and recommended for application to substrates to provide a firm bond between the substrate and subsequent coats.

Quick-dry enamel means a nonflat coating that has the following characteristics:

- 1) Is capable of being applied directly from the container under normal conditions with ambient temperatures between 16 and 27 °C (60 and 80 °F);
- 2) When tested in accordance with American Society for Testing Materials Method D1640, Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature, sets to touch in two hours or less, is tack free in four hours or less, and dries hard in eight hours or less by the mechanical test method; and
- 3) Has a dried film gloss of 70 or above on a 60 degree meter.

Quick-dry primer, sealer, and undercoater means a primer, sealer, or undercoater that is dry to the touch

in one-half hour and can be recoated in two hours when tested in accordance with American Society for Testing and Materials Method D1640, Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature.

Recycled coating means an architectural coating that contains some portion of post-consumer coating. Recycled architectural coatings include, but are not limited to, post-consumer coatings that have been repackaged or blended with virgin coating materials.

Repackaging means to transfer an architectural coating from one container to another container for sale or distribution in the final container.

Repair and maintenance thermoplastic coating means an industrial maintenance coating that has vinyl or chlorinated rubber as a primary resin and is recommended solely for the

repair of existing vinyl or chlorinated rubber coatings without the full removal of the existing coating system.

Roof coating means a nonbituminous coating or a nonthermoplastic rubber coating formulated and recommended for application to exterior roofs for the

primary purpose of preventing penetration of the substrate by water or reflecting heat and reflecting ultraviolet radiation.

Rust preventive coating means a coating formulated and recommended for use in preventing the corrosion of ferrous metal surfaces in residential situations.

Sales means the introduction of a coating product into U.S. commerce.

Sanding sealer means a clear wood coating formulated and recommended for application to bare wood to seal the wood and to provide a coat that can be sanded to create a smooth surface. A sanding sealer that also meets the definition of a lacquer sanding sealer shall not be considered in this category, but shall be considered to be in the lacquer category.

Sealer means a coating formulated and recommended for application to substrates for one or more of the following purposes: to prevent subsequent coatings from being absorbed by the substrate; to prevent harm to subsequent coatings by materials in the substrate; to block stains, odors, or efflorescence; to seal fire, smoke, or water damage; or to condition chalky surfaces.

Semitransparent stain means a coating formulated and recommended for application to substrates to impart a desired color without completely concealing the surface or its natural texture or grain pattern.

Shellac means a clear or pigmented coating formulated with natural resins soluble in alcohol (including, but not limited to, the resinous secretions of the lac beetle, Lacifffer lacca). Shellacs dry by evaporation without chemical reaction and provide a quick-drying, solid protective film that may be used for blocking stains.

Swimming pool coating means a coating formulated and recommended to coat the interior of swimming pools and to resist swimming pool chemicals.

Thermoplastic rubber coating and mastic means a coating or mastic formulated and recommended for application to roofing or other structural surfaces and that incorporates no less than 40 percent by weight of thermoplastic rubbers in the total resin solids and may also contain other ingredients including, but not limited to, fillers, pigments, and modifying resins.

Tint Base means a coating to which colorant is added to produce a desired color.

Traffic marking coating means a coating formulated and recommended for marking and striping streets, highways, and other traffic surfaces including, but not limited to, curbs, berms, driveways, parking lots, and airport runways.

Undercoater means a coating formulated and recommended to provide a smooth surface for subsequent coats.

Varnish means a clear or semi-transparent coating (excluding lacquers and shellacs) formulated to provide a durable, solid, protective film. Varnishes may contain small amounts of pigment to color a surface, or to control the final sheen or gloss of the finish.

Volatile organic compound or VOC means any organic compound that participates in atmospheric photochemical reactions, that is, any organic compound other than those which the Administrator designates as having negligible photochemical reactivity. For a list of compounds that the Administrator has designated as having negligible photochemical reactivity, also referred to as exempt compounds, refer to 40 CFR 51.100.

VOC content. (1) VOC content means the amount of VOC, in grams, in one liter of coating thinned to the

manufacturer's maximum recommendation excluding the volume of any water, exempt compounds, or colorant added to tint bases. Grams of VOC per liter of material means the weight of VOC per volume of material and is calculated by using equation 1 unless the coating meets the definition of a "low solids" stain or wood preservative, in which case, Equation 2 is used.

$$\text{VOC} = \frac{(W_s - W_w - W_{ec})}{(V_m - V_w - V_{ec})} \quad \text{Eq 1}$$

where:

- VOC = grams of VOC per liter of coating
- W_s = weight of volatiles, in grams
- W_w = weight of water, in grams
- W_{ec} = weight of exempt compounds, in grams
- V_m = volume of coating, in liters
- V_w = volume of water, in liters
- V_{ec} = volume of exempt compounds, in liters

(2) Equation 2 may be used to calculate the VOC content of the coating for low solids stains and wood preservatives:

$$\text{VOC}_{ls} = \frac{(W_s - W_w - W_{ec})}{(V_m)} \quad \text{Eq 2}$$

where:

VOC_{ls} = the VOC content of a low solids
coating in grams of VOC per liter of
coating

W_s = weight of volatiles, in grams

W_w = weight of water, in grams

W_{ec} = weight of exempt compounds, in grams

V_m = volume of coating, in liters

Waterproofing (treatment) sealer means a coating
that is applied to porous substrates for the primary
purpose of preventing the penetration of water.

§59.402 Standards.

(a) Effective April 1, 1997 and thereafter,
manufacturers and importers of architectural coatings
subject to this subpart shall limit the VOC content of
each architectural coating manufactured or imported to
the VOC levels in Table 1, except as provided in §59.407.

TABLE 1. ARCHITECTURAL COATING VOLATILE ORGANIC
COMPOUND CONTENT LEVELS

Unless otherwise specified, units are in grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation excluding the volume of any water, exempt compounds, or colorant added to tint bases.

Coating category	Effective April 1, 1997
Antenna coatings	530
Anti-fouling coatings	400
Anti-graffiti coatings	600
Bituminous coatings and mastics	500
Bond breakers	600
Chalkboard resurfacers	450
Concrete curing compounds	350
Concrete protective coatings	400
Dry fog coatings	400
Extreme high durability coatings	800
Fire-retardant/resistive coatings:	
Clear	850
Opaque	450
Flat coatings:	
Exterior	250
Interior	250
Floor coatings	400
Flow coatings	650
Form release compounds	450
Graphic arts coatings (sign paints)	500
Heat reactive coatings	420
High temperature coatings	650
Impacted immersion coatings	780
Industrial maintenance coatings	450
Lacquers (including lacquer sanding sealers)	680

TABLE 1. ARCHITECTURAL COATING VOLATILE ORGANIC
COMPOUND CONTENT LEVELS (Continued)

Coating category	Effective April 1, 1997
Magnesite cement coatings	600

TABLE 1. ARCHITECTURAL COATING VOLATILE ORGANIC
COMPOUND CONTENT LEVELS (Continued)

Coating category	Effective April 1, 1997
Mastic texture coatings	300
Metallic pigmented coatings	500
Multi-colored coatings	580
Nonferrous ornamental metal lacquers and surface protectants	870
Nonflat coatings:	
Exterior	380
Interior	380
Nuclear coatings	420
Pretreatment wash primers	780
Primers and undercoaters	350
Quick-dry coatings:	
Enamels	450
Primers, sealers, and undercoaters	450
Repair and maintenance thermoplastic coatings	650
Roof coatings	250
Rust preventative coatings	400
Sanding sealers (other than lacquer sanding sealers)	550
Sealers (including interior clear wood sealers)	400
Shellacs:	
Clear	650
Opaque	550
Stains:	
Clear and semitransparent	550
Opaque	350
Low solids	120 ^a
Swimming pool coatings	600
Thermoplastic rubber coatings and mastics	550
Traffic marking coatings	150

TABLE 1. ARCHITECTURAL COATING VOLATILE ORGANIC
COMPOUND CONTENT LEVELS (Continued)

Coating category	Effective April 1, 1997
Varnishes	450

TABLE 1. ARCHITECTURAL COATING VOLATILE ORGANIC COMPOUND CONTENT LEVELS (Concluded)

Coating category	Effective April 1, 1997
Waterproofing sealers and treatments:	
Clear	600
Opaque	400
Wood preservatives:	
Below ground wood preservatives	550
Clear and semitransparent	550
Opaque	350
Low solids	120 ^a

^aUnits are grams of VOC per liter of coating, including water and exempt compounds, thinned to the maximum thinning recommended by the manufacturer.

(b) If anywhere on the container of any architectural coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or importer or anyone acting on their behalf, any representation is made that the coating may be suitable for use in more than one of the coating categories listed in Table 1, then the most restrictive VOC level shall apply. This requirement does not apply to the representation of the following coatings in paragraphs (b)(1) through (b)(7).

(1) High temperature coatings that may also be suitable for use as metallic pigmented coatings shall only be subject to the VOC level in Table 1 for high temperature coatings.

(2) Lacquer sanding sealers that may also be suitable for use as sanding sealers in conjunction with clear lacquer topcoats shall only be subject to the VOC level in Table 1 for lacquer sanding sealers.

(3) Metallic pigmented coatings that may also be suitable for use as roof coatings, industrial maintenance coatings, or primers shall only be subject to the VOC level in Table 1 for metallic pigmented coatings.

(4) Shellacs that may also be suitable for use as primers, sealers, or undercoaters shall only be subject to the VOC level in Table 1 for shellacs.

(5) Fire-retardant/resistive coatings that may be suitable for use as any other architectural coating shall only be subject to the VOC level in Table 1 for fire-retardant/resistive coatings.

(6) Pretreatment wash primers that may be suitable for use as primers shall only be subject to the VOC level in Table 1 for pretreatment wash primers.

(7) Industrial maintenance coatings that may also be suitable for use as primers shall only be subject to the VOC level in Table 1 for industrial maintenance coatings.

(c) For the purpose of determining compliance with the standards of this subpart, the VOC content shall be

determined using the procedure in §59.404. With the exception of low solids stains and low solids wood preservatives, the VOC content shall be determined in grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation excluding the volume of any water, exempt compounds, or colorant added to tint bases. For low solids stains and low solids wood preservatives, the VOC content shall be determined in units of grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation including the volume of any water and exempt compounds.

(d) For the purpose of determining compliance with the requirements of this subpart, manufacturers or importers of recycled architectural coatings may calculate an adjusted VOC content to account for the post-consumer coating content. The adjusted VOC content shall be determined using Equation 3.

$$d = \text{Actual VOC} - \left(\text{Actual VOC} \left(\frac{\text{Percent Pos consumer Coa}}{100} \right) \right) \quad \text{Eq3}$$

where:

Adjusted VOC = The VOC content assigned to
the recycled coating for

purposes of complying with provisions of this section (grams VOC per liter of coating thinned to the manufacturer's maximum recommendation excluding the volume of any water, exempt compounds, or colorant added to tint bases.)

Actual VOC = The VOC content of the coating product as determined using the procedure in §59.404.

Percent
Post-consumer Coating = The volume percent of the coating product that is post-consumer architectural coating as determined in paragraph (e) of this section.

(e) Manufacturers or importers of recycled architectural coatings calculating an adjusted VOC as described in §59.402(d) of this section shall determine the post-consumer architectural coating content of each recycled coating using Equation 4.

$$\frac{\text{Volume of Post-consumer Coating}}{\text{Volume of Post-consumer Coating} + \text{Volume of Virgin Materials}} \quad \text{Eq 4}$$

where:

Percent Post-consumer = The volume percent of a recycled coating that is post-consumer coating materials.

Volume of Post-consumer Coating = The volume of post-consumer coating materials per gallon used in the production of a recycled coating.

Volume of Virgin Materials = The volume of virgin coating materials per gallon used in the production of a recycled coating.

§59.403 Container labeling requirements.

(a) Manufacturers and importers subject to the provisions of this subpart shall include the information listed in paragraphs (a)(1) through (a)(3) of this section on the label or lid of all architectural coatings subject to this subpart that are manufactured or imported on or after April 1, 1997.

(1) The date of manufacture of the contents or a code indicating the date of manufacture.

(2) A statement of the manufacturer's recommendation regarding thinning of the coating. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation shall specify that the

coating is to be applied without thinning.

(3) The maximum VOC content of the coating in the container, including any recommended thinning. With the exception of low solids stains and low solids wood preservatives, this VOC content shall be displayed in units of grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation excluding the volume of any water, exempt compounds, or colorant added to tint bases. For low solids stains and low solids wood preservatives, the VOC content shall be displayed in units of grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation including the volume of any water and exempt compounds.

(b) Manufacturers and importers of industrial maintenance coatings manufactured or imported on or after April 1, 1997 that are subject to the provisions of this subpart shall display on the label or lid of the container the phrase "NOT INTENDED FOR RESIDENTIAL USE."

(c) Manufacturers or importers of recycled coatings complying with the requirements of §59.402(d) shall indicate the post-consumer coating content by including the following statement on the container label or lid:

"CONTAINS NOT LESS THAN X PERCENT BY VOLUME POST-CONSUMER COATING," where "X" is replaced by the percent, by volume, of post-consumer architectural coating.

§59.404 Test methods.

(a) Except as provided in paragraph (b) of this section, the EPA's Reference Method 24 of Appendix A of Part 60 of this chapter shall be used to determine compliance with the VOC levels in Table 1 of §59.402. Analysis of waterborne coating VOC content determined by Reference Method 24 shall be adjusted as described in Section 4.4 of Reference Method 24.

(b) The Administrator may approve, on a case-by-case basis, alternative methods of determining the VOC content of coatings if they are demonstrated to the Administrator's

satisfaction to provide results equivalent to or more accurate than those obtained using Reference Method 24.

§59.405 Recordkeeping requirements.

(a) Each manufacturer or importer complying with the recycled coating provisions in §59.402(d) shall maintain records in written or electronic form of the information specified in paragraphs (a)(1) through (a)(6) of this

section for a period of three years.

(1) The minimum percent post-consumer coating content for each recycled coating.

(2) Calculations of the adjusted VOC as determined using Equation 3 in §59.402(d) for each recycled coating.

(3) The volume of coating received for recycling.

(4) The volume of coating received that was unusable.

(5) The volume of virgin materials.

(6) The volume of the final recycled coating manufactured or imported.

§59.406 Reporting requirements.

(a) All reports in this section shall be submitted to the appropriate address as listed in §60.4 of subpart A of this chapter.

(b) Each manufacturer and importer of coatings subject to the provisions of this subpart shall submit an initial report no later than April 1, 1997 or within 180 days after the date of the first architectural coating manufactured or

imported. The initial report shall include the information in paragraphs (b)(1) and (b)(2) of this

section.

(1) The name and mailing address of the manufacturer or importer.

(2) A list of the categories from Table 1 in §59.402 in which coating products are manufactured or imported.

(c) Manufacturers or importers of recycled architectural coatings shall report to the Administrator the information in paragraphs (c)(1) through (c)(5) of this section for each coating product for which the adjusted VOC content, as determined in §59.402(d) is to be used to demonstrate compliance. This report shall be submitted by February 1 of the calendar year following the year in which the coating(s) is (are) introduced into commerce.

(1) The volume of coating received for recycling.

(2) The volume of coating received that was unusable.

(3) The volume of virgin materials used.

(4) The minimum post-consumer content of the coatings manufactured or imported.

(5) The volume of the final recycled coating manufactured or imported.

(d) In cases where codes are used to represent the date of manufacture, as provided in §59.403(a)(1), the

manufacturer or importer shall submit an explanation of each date code to the Administrator by April 1, 1997 or within 30 days after becoming subject to the requirements of this subpart. This report may be included with the initial compliance report. An explanation of any new date codes shall be filed with the Administrator no later than 30 days after the new data code is first introduced into commerce.

§59.407 Variances.

(a) Any manufacturer or importer of architectural coatings subject to the provisions of this subpart that cannot comply with the requirements of this subpart because of extraordinary circumstances beyond reasonable control may apply in writing to the Administrator for a variance. The variance application shall include the information specified in paragraphs (a)(1) through (a)(3).

(1) The specific grounds upon which the variance is sought.

(2) The proposed date(s) by which compliance with the provisions of this subpart will be achieved.

(3) A compliance report reasonably detailing the method(s) by which compliance will be achieved.

(b) Upon receipt of a variance application containing the information required in paragraph (a) of this section, the Administrator will hold a public hearing to determine whether, under what conditions, and to what extent, a variance from the requirements in this subpart is necessary and will be permitted. A hearing will be initiated no later than 75 days after receipt of a variance application. Notice of the time and place of the hearing will be sent to the applicant by certified mail not less than 30 days prior to the hearing. Notice of the hearing will also be published in the FEDERAL REGISTER and sent to every person who requests such notice, not less than 30 days prior to the hearing. At least 30 days prior to the hearing, the variance application will be made available to the public for inspection. Information submitted to the Administrator by a variance applicant may be claimed as confidential. The Administrator may consider such confidential information in reaching a decision on a variance application. Interested members of the public will be allowed a reasonable opportunity to testify at the hearing and their testimony will be considered.

(c) The Administrator may grant a variance if the

criteria specified in paragraphs (c)(1) through (c)(3) are met.

(1) If there are reasons beyond the reasonable control of the applicant that complying with the provisions of this subpart would result in economic hardship,

(2) The public interest in mitigating the extraordinary hardship to the applicant by issuing the variance outweighs the public interest in avoiding any increased emissions or air contaminants that would result from issuing the variance, and

(3) The compliance report proposed by the applicant can reasonably be implemented and will achieve compliance as expeditiously as possible.

(d) Any variance order will specify a final compliance date by which the requirements of this subpart will be achieved. Any variance order will contain a condition that specifies increments of progress necessary to assure timely compliance.

(e) A variance shall cease to be effective upon failure of the party to whom the variance was granted to

comply with any term or condition of the variance.

(f) Upon the application of any party, the Administrator may review, and for good cause, modify, or revoke a variance from requirements of this subpart after holding a public hearing in accordance with the provisions of paragraph (b) of this section.